

Work Order ID 125228

Tuesday, October 07, 2014 10:38:37 AM

125228

Page 1

Item ID: D3391-021

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Fwd Tube Assembly

Stop

NS2

Start Date: 10/06/14 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/06/14 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MCSDate: 14-10-08

Tooling: _____ Date: _____

Run Start

NR1

QC: _____

Date: _____ SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3391	I

100

100

Skidtubes

Skidtubes

0.00

14-10-14

Skidtubes

Memo

0.00

Cut as per dwg.

110

110

CNC Bend 1

CNC Delta 100 Bender

BENDING MACHINE - SKIDTUBES

0.00

Memo

0.00

Bend as per Dwg D3391 Using Bend Prog 3391021

10 BL 14-10-15

120

120

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

DAS 03 08-09 14-10-15 DAS
08-09H 6.65"

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY									
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other					

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Item ID: D3391-021

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Fwd Tube Assembly

Stop

NS2

Start Date: 10/06/14 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/06/14 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run

Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

130

HAAS 1

HAAS CNC vertical machine #1

HAAS CNC VERTICAL MACHINING #1

0.00

*ark 14/10/27**1**0*

140

140

QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

0.00

*ark 14/10/27**1**0*

150

150

Mill Conv

Conventional Milling Machine

CONVENTIONAL MILLING MACHINE

0.00

Memo

0.00

Drill X1 Aft cap as per Dwg D3391 .1875" dia

*1**0**SC-L**14/10/31*

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order:	
Part No.	
NCR No.	

DISPOSITION

- Rework
- Scrap
- Use-as-is
- Suspected Unapproved

AGAINST DEPARTMENT/PROCESS

- | | | | |
|---------------|-----------|---------------------|-------------|
| Skid-tube | Crosstube | Water Jet | Engineering |
| Machining | Small Fab | Prod. Eng. Coor. | Quality |
| Thermoforming | Finishing | Rec/Store/Packaging | Other |
| Large Fab | Composite | Supplier | |

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General			
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Folio/Program	<input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Pressure/Forced
<input type="checkbox"/> Centre Not Concentric	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Grain	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Set-up
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damage/Defect	<input type="checkbox"/> Hardware	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Temperature/Cure
<input type="checkbox"/> Crimp/Kink/Ripple/Wave	<input type="checkbox"/> Burrs	<input type="checkbox"/> Inspection Incomplete/Unqualified	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Weld
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Wrong Stock Pulled
<input type="checkbox"/> Crushing	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misaligned/off center	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Other
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Power Loss/Surge	
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Drawing	<input type="checkbox"/> Misread		
<input type="checkbox"/> Marks/Chatter	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Off-set		
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Calibration		
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Fit/Function	<input type="checkbox"/> Out of Sequence		

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Page 3

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Stop

NS2

Start Date: 10/06/14 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/06/14 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
						Stop	*NR2*
	QC:	Date:	SPC (Y/N):	Date:			

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC2- Inspect parts off machine FAI/FAIB	0.00							

160

QC

Quality Control

1	0	SL-L1
		10/07/14

170

QC8- Inspect parts - second check

0.00

170

QC

Quality Control

DAS	44	14/11/05
	9-89	

DQA: _____ Date: _____

DART
AEROSPACE

WORK ORDER NON-CONFORMANCE / UPDATE

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Item ID: D3391-021

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Fwd Tube Assembly

Stop

NS2

Start Date: 10/06/14 **Start Qty:** 1.00

1

Cust Item ID:

Required Date: 10/06/14 **Req'd Qty:** 1.00

1

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

**Sequence ID/
Work Center ID**

**Operation
Description**

180

180

Skidtubes

Skidtubes

Skidtubes



**Set Up/
Run Hours**

0.00

Tool ID

Tool #

**Plan
Code**

**Accept
Qty**

**Reject
Qty**

**Reject
Number**

**Insp.
Stamp**

Memo

0.00

1-Drill Remaining two holes for tow cap using DT 8819 Locating off of .1875" holes drilled in previous step

2-Drill float bag holes as per Dwg D3391 using DT8798(Do not open tow cap holes to finish size)
(ONLY DRILL HOLES MARKED "A")

3-Open tow cap holes to .208" as per Dwg D3391

4-Open Tow Ring hole to .640" as per Dwg D3391

5- open float bag holes 0.328" and counter sink as per dwg D3391

6-Deburr & Scribe Batch number Inside aft end.

7-Transfer drill D3391-021 with D3391-023

NO WEARPLATE HOLES ARE TRANSFER DRILLED

MID TUBE BATCH # 123945

14-11-5

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

<p>Work Order: _____</p> <p>Part No. _____</p> <p>NCR No. _____</p>	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
---	--	---

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY									
Landing Gear			General						
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Folio/Program	<input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Pressure/Forced					
<input type="checkbox"/> Centre Not Concentric	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Grain	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Set-up					
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damage/Defect	<input type="checkbox"/> Hardware	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Temperature/Cure					
<input type="checkbox"/> Crimp/Kink/Ripple/Wave	<input type="checkbox"/> Burrs	<input type="checkbox"/> Inspection Incomplete/Unqualified	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Weld					
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Wrong Stock Pulled					
<input type="checkbox"/> Crushing	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misaligned/off center	<input type="checkbox"/> Positioned Wrong	<input type="checkbox"/> Other					
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Power Loss/Surge						
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Drawing	<input type="checkbox"/> Misread							
<input type="checkbox"/> Marks/Chatter	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Off-set							
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Calibration							
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Fit/Function	<input type="checkbox"/> Out of Sequence							

Work Order ID 125228

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Page 5

Item ID: D3391-021

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Fwd Tube Assembly

Stop

NS2

Start Date: 10/06/14 **Start Qty:** 1.00

1

Cust Item ID:

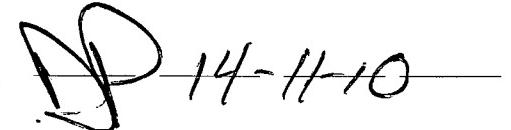
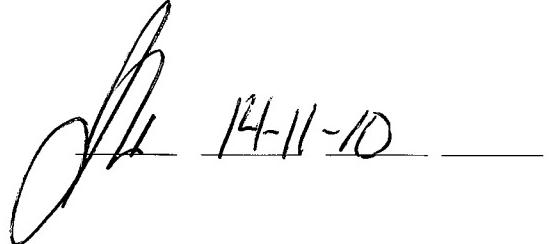
Required Date: 10/06/14 **Req'd Qty:** 1.00

1

Customer:

Reference:

Approvals:	Process Plan: _____	Date: _____	Tooling: _____	Date: _____	Run	Start	*NR1*
	QC: _____	Date: _____	SPC (Y/N): _____	Date: _____		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 *1 QN* QC	QC5- Inspect part completeness to step on W/O Quality Control	0.00 0.00	DAS 9-89	16 14/11/10					
200 *200* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00							 14-11-10
210 *210* QC Quality Control	QC7-Inspect Chemical Conversion Coat Memo	0.00							 14-11-10

DQA:

Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: _____

Work Order update only

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General		
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Folio/Program	<input type="checkbox"/> Outside Dimensions
<input type="checkbox"/> Centre Not Concentric	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Grain	<input type="checkbox"/> Over/Under tolerance
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damage/Defect	<input type="checkbox"/> Hardware	<input type="checkbox"/> Part Incorrect
<input type="checkbox"/> Crimp/Kink/Ripple/Wave	<input type="checkbox"/> Burrs	<input type="checkbox"/> Inspection Incomplete/Unqualified	<input type="checkbox"/> Part Lost/Missing
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Moved
<input type="checkbox"/> Crushing	<input type="checkbox"/> Countersink	<input type="checkbox"/> Misaligned/off center	<input type="checkbox"/> Positioned Wrong
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Power Loss/Surge
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Drawing	<input type="checkbox"/> Misread	<input type="checkbox"/> Other
<input type="checkbox"/> Marks/Chatter	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Off-set	
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Calibration	
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Fit/Function	<input type="checkbox"/> Out of Sequence	

DQA:

Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: _____

Work Order update only

<p>Work Order: _____</p> <p>Part No. _____</p> <p>NCR No. _____</p>	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY									
Landing Gear			General						
	Bending		Bend		Folio/Program		Outside Dimensions		Pressure/Forced
	Centre Not Concentric		BOM/Route		Grain		Over/Under tolerance		Set-up
	Cracks		Broken/Damage/Defect		Hardware		Part Incorrect		Temperature/Cure
	Crimp/Kink/Ripple/Wave		Burrs		Inspection Incomplete/Unqualified		Part Lost/Missing		Weld
	Cuffs		Contamination		Instructions Incomplete/Unclear		Part Moved		Wrong Stock Pulled
	Crushing		Countersink		Misaligned/off center		Positioned Wrong		
	Heat Treat		Cut Too Short		Mislabeled		Power Loss/Surge		
	Inspection Strip in Tube		Drawing		Misread				
	Marks/Chatter		Drill Holes		Off-set				
	Turning Sequence		Finish		Out of Calibration				
	Wave/Twist in Tube		Fit/Function		Out of Sequence				

Work Order ID 125228

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125228

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Item ID: D3391-021

Accept

N900040100

Setup

Start

NS1**Revision ID:****Item Name:** Fwd Tube Assembly

Stop

NS2**Start Date:** 10/06/14 **Start Qty:** 1.00***1*****Cust Item ID:****Required Date:** 10/06/14 **Req'd Qty:** 1.00***1*****Customer:****Reference:**

Approvals:	Process Plan: _____	Date: _____	Tooling: _____	Date: _____	Run	Start	*NR1*
	QC: _____	Date: _____	SPC (Y/N): _____	Date: _____	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240 *240* Powdercoat	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <i>M 129808</i> Memo START TIME: <u>8:15</u> . OVEN TEMPERATURE: <u>320</u> FINISH TIME: <u>8:45</u> .	0.00						<i>1</i>	<i>14-11-12.</i> DAS 34 9.89
250 *250* QC Quality Control	QC3- Inspect Part Finish Memo	0.00						<i>1x</i>	<i>15</i> DAS 15 9.89
254 *254* HandFinish Hand Finishing	Assemble as per dwg Memo	0.00						<i>1x</i>	<i>15</i> DAS 15 9.89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____

Date: _____

Work Order update only

<p>Work Order: _____</p> <p>Part No. _____</p> <p>NCR No. _____</p>	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY									
Landing Gear			General						
	Bending		Bend		Folio/Program		Outside Dimensions		Pressure/Forced
	Centre Not Concentric		BOM/Route		Grain		Over/Under tolerance		Set-up
	Cracks		Broken/Damage/Defect		Hardware		Part Incorrect		Temperature/Cure
	Crimp/Kink/Ripple/Wave		Burrs		Inspection Incomplete/Unqualified		Part Lost/Missing		Weld
	Cuffs		Contamination		Instructions Incomplete/Unclear		Part Moved		Wrong Stock Pulled
	Crushing		Countersink		Misaligned/off center		Positioned Wrong		
	Heat Treat		Cut Too Short		Mislabeled		Power Loss/Surge		
	Inspection Strip in Tube		Drawing		Misread				
	Marks/Chatter		Drill Holes		Off-set				
	Turning Sequence		Finish		Out of Calibration				
	Wave/Twist in Tube		Fit/Function		Out of Sequence				

Work Order ID 125228

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125228

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Item ID: D3391-021

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Fwd Tube Assembly

Stop

NS2Start Date: 10/06/14 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 10/06/14 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp
DAS
38
9-89

256

QC5- Inspect part completeness to step on W/O

0.00

256

QC

Quality Control

0.00

/ / / / /

NOV 14 2014

260

Identify as per dwg & Stock Location: w10

0.00

0412-742-043 / 3124111

260

Packaging

Packaging

0.00

/ / / / /

280

QC21- Final Inspection - Work Order Release

0.00

280

QC

Quality Control

0.00

14/11/17 /
MF 14-11-17

DQA: _____

Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____

Date: _____

Work Order update only

<p>Work Order: _____</p> <p>Part No. _____</p> <p>NCR No. _____</p>	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY									
Landing Gear			General						
Bending			Bend				Folio/Program		
Centre Not Concentric			BOM/Route				Grain		
Cracks			Broken/Damage/Defect				Hardware		
Crimp/Kink/Ripple/Wave			Burrs				Inspection Incomplete/Unqualified		
Cuffs			Contamination				Instructions Incomplete/Unclear		
Crushing			Countersink				Misaligned/off center		
Heat Treat			Cut Too Short				Mislabeled		
Inspection Strip in Tube			Drawing				Misread		
Marks/Chatter			Drill Holes				Off-set		
Turning Sequence			Finish				Out of Calibration		
Wave/Twist in Tube			Fit/Function				Out of Sequence		

Picklist Print

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Page 1

Work Order ID: 125228

125228
D3391-021

Parent Item: D3391-021

Parent Item Name: Fwd Tube Assembly

Start Date: 10/06/14

Required Date: 10/06/14

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP A05.09.13 New issue KJ/JLM
 IPP B06.02.10 Dwg rev.D ecn 773 EC
 IPP C06.05.02 Added inspections EC
 IPP D 07.03.13 rev F dwg EC
 IPP E 07.11.07 revG dwg ecn1053P EC verified by: DD
 IPP Rev:f ECN 1056 07-11-12 DD verified by: EC
 IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC
 IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC
 IPP Rev I 09.02.02 added hardware EC verified by: DD IPP Rev:J
 11.11.14 AS PER REV.I DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4095-051		Manufactured	No				Each	27.0000		1	**		

D4095-051

Wearpad Assembly

Location	Loc Qty	Loc Code
FP001	27	
116096	15	X1
120520	12	

D6013-047

D6013-047

Skidtube Material

Location	Loc Qty	Loc Code
LG003	157	
72505	35	
86064	122	D

DQA:

Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: _____

Work Order update only

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>		
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>		
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>			

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY									
Landing Gear					General				
Bending		Bend			Folio/Program				
Centre Not Concentric		BOM/Route			Grain				
Cracks		Broken/Damage/Defect			Hardware				
Crimp/Kink/Ripple/Wave		Burrs			Inspection Incomplete/Unqualified				
Cuffs		Contamination			Instructions Incomplete/Unclear				
Crushing		Countersink			Misaligned/off center				
Heat Treat		Cut Too Short			Mislabeled				
Inspection Strip in Tube		Drawing			Misread				
Marks/Chatter		Drill Holes			Off-set				
Turning Sequence		Finish			Out of Calibration				
Wave/Twist in Tube		Fit/Function			Out of Sequence				

Picklist Print

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Page 2

Work Order ID: 125228

125228
D3391-021

Parent Item: D3391-021

Parent Item Name: Fwd Tube Assembly

Start Date: 10/06/14

Required Date: 10/06/14

Start Qty: 1.00

Required Qty: 1.00

D3670-4-200

Manufactured No

220

Each

174.0000

4

**

4
14-11-10

D3670-4-200

Bushing

Location	Loc Qty	Loc Code
FG	10	_____
87709	10	_____
LG001	164	_____
109108	164	_____

D3401-041

Manufactured No

109108

Each 17.0000

**

4
1
111 14/11/12

D3401-041

Tow Cap Assembly

Location	Loc Qty	Loc Code
FP001	17	_____
109127	7	V C
92680	1	_____
94116	1	_____
94303	8	_____

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____

Date: _____

Work Order update only

<p>Work Order: _____</p> <p>Part No. _____</p> <p>NCR No. _____</p>	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY									
Landing Gear			General						
			Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>			
			BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>			
			Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>			
			Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>			
			Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>			
			Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>				
			Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>				
			Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>					
			Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>					
			Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>					
			Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>					

Picklist Print

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Work Order ID: 125228

125228
D3391-021

Parent Item: D3391-021

Parent Item Name: Fwd Tube Assembly

Start Date: 10/06/14

Required Date: 10/06/14

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0332R

Purchased

No

Each

8,989.000

10

**

NAS1149C0332R

WASHER

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
CA	83	
m129682	83	
ST278	8906	
122063	41	
125654	457	
m126319	51	
m127306	2065	
m127831	26	
m128591	75	
m129499	191	
<u>m130325</u>	5000	K10
m130466	1000	

AN3C4A

Purchased

No

Each

905.0000

10

**

AN3C4A

Bolt

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	20	
122814	20	N130716
ST350	885	X10
124221	12	
M127410	1	
M127832	62	
M128606	32	
M128634	8	
M128739	4	
M128879	71	
M129520	695	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

<p>Work Order: _____</p> <p>Part No. _____</p> <p>NCR No. _____</p>	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS Skid-tube <input type="checkbox"/> Crosstube <input type="checkbox"/> Machining <input type="checkbox"/> Small Fab <input type="checkbox"/> Thermoforming <input type="checkbox"/> Finishing <input type="checkbox"/> Large Fab <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
---	--	---

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY									
Landing Gear			General						
	Bending		Bend		Folio/Program		Outside Dimensions		Pressure/Forced
	Centre Not Concentric		BOM/Route		Grain		Over/Under tolerance		Set-up
	Cracks		Broken/Damage/Defect		Hardware		Part Incorrect		Temperature/Cure
	Crimp/Kink/Ripple/Wave		Burrs		Inspection Incomplete/Unqualified		Part Lost/Missing		Weld
	Cuffs		Contamination		Instructions Incomplete/Unclear		Part Moved		Wrong Stock Pulled
	Crushing		Countersink		Misaligned/off center		Positioned Wrong		
	Heat Treat		Cut Too Short		Mislabeled		Power Loss/Surge		
	Inspection Strip in Tube		Drawing		Misread				
	Marks/Chatter		Drill Holes		Off-set				
	Turning Sequence		Finish		Out of Calibration				
	Wave/Twist in Tube		Fit/Function		Out of Sequence				

Picklist Print

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Page 4

Work Order ID: 125228

125228
D3391-021

Parent Item: D3391-021

Parent Item Name: Fwd Tube Assembly

Start Date: 10/06/14

Required Date: 10/06/14

Start Qty: 1.00

Required Qty: 1.00

D3672-1

Manufactured No

Each 947.0000

4

**

M W W 12

D3672-1

Washer, Phenolic

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FG	10	
85222	10	
ST055	937	
113581	474	
120116	421	X-1
80369	34	
99099	8	

AELS-1032-225

AELS8-1032-225 Purchased No

Each 0.0000

10

AFI S-1032-225 * AELS-1032-225
Insert

X130565

**

(X10) M W W 12

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

<p>Work Order: _____</p> <p>Part No. _____</p> <p>NCR No. _____</p>	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS Skid-tube <input type="checkbox"/> Crosstube <input type="checkbox"/> Machining <input type="checkbox"/> Small Fab <input type="checkbox"/> Thermoforming <input type="checkbox"/> Finishing <input type="checkbox"/> Large Fab <input type="checkbox"/> Composite <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY									
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other					

DART AEROSPACE LTD	Work Order:	175228
Description: Float Skidtube (412)	Part Number:	D3391-1
Inspection Dwg: D3391 Rev: I		Page 1 of 1

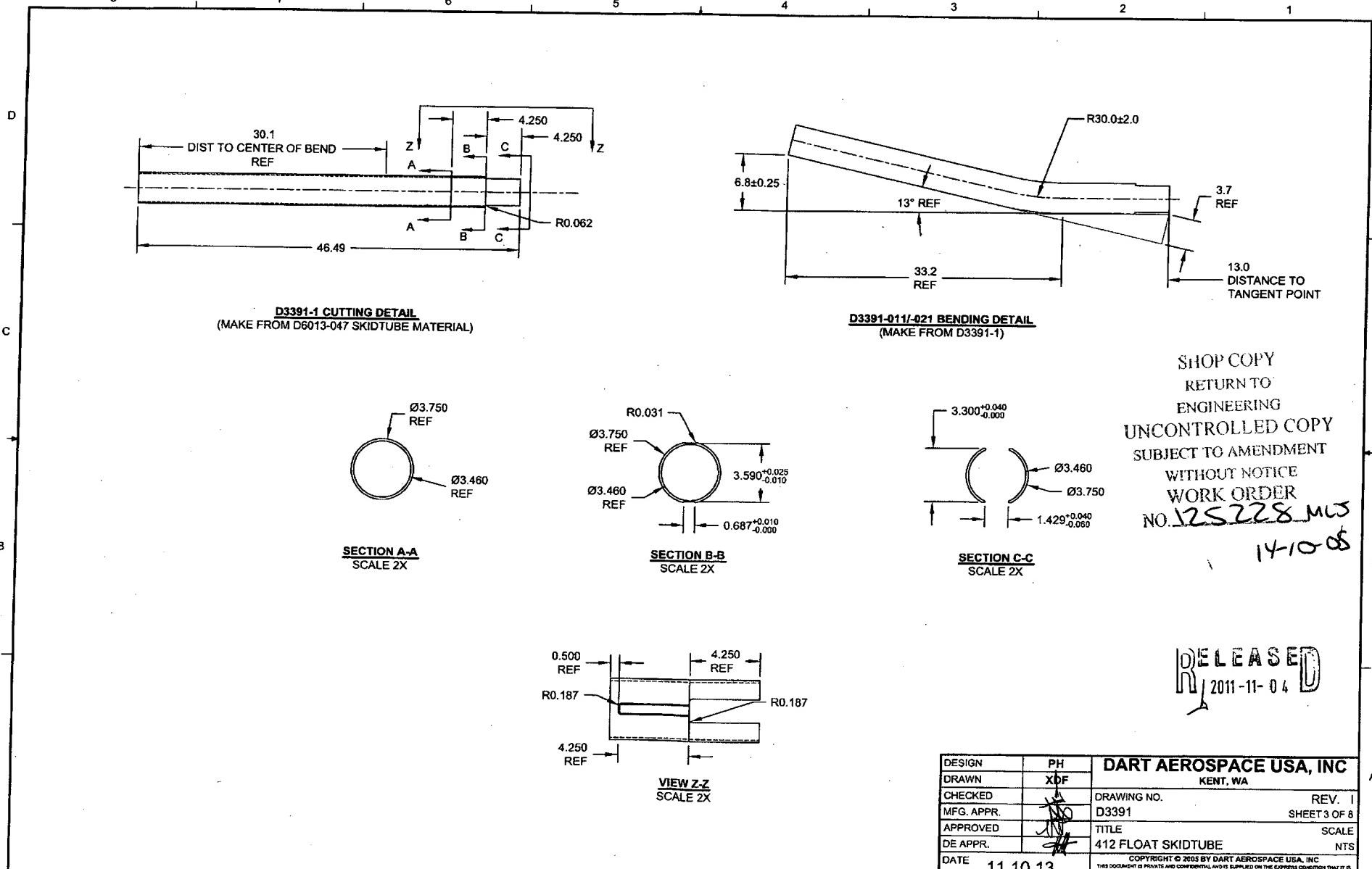
FIRST ARTICLE INSPECTION CHECKLIST

DAS

Measured by:	<i>[Signature]</i>	Audited by:	44 9-89	Preliminary Approval:	
Date:	14/10/27	Date:	14/11/05	Date:	

Rev	Date	Change	Revised by	Approved
A	06.04.27	New Issue P/O D3391-011/-021	KJ/JLM	
B	06.06.19	Tolerances revised per D3391 Rev. E	KJ/JLM	
C	07.03.21	Dimensions removed per Dwg rev. F	KJ/JLM	
D	07.11.23	Dwg Rev. updated	KJ/EC/DD	
E	09.12.14	Dwg Rev updated	KJ	
F	11.06.21	Dimension 0.500 added	KJ	<i>[Signature]</i>
G	12.05.15	Dwg Rev updated	KJ	<i>[Signature]</i>

8 7 6 5 4 3 2 1



8 7 6 5 4 3 2 1

